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Yeasts of Carbonated Beverages

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EFFECT OF REACTION ON THE GROWTH OF YEASTS

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(ABSTRACT)

A study was made to determine the amounts of organic acids necessary to inhibit the growths of some yeasts isolated from bottled beverages. It was found that, in a medium containing the same amount of cane sugar used in bottled beverages (10%), with 0.1% peptone as a source of nitrogen and made solid with 2% agar agar, it was necessary to add sufficient acid to give a pH value of 3.3 to 2.6 in order to inhibit the growth of five strains of yeasts of variable sensitiveness. In a similar medium without the agag, acid to give a pH value of 2.7 to 2.3 was required for inhibition of growth.

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YEASTS OF CARBONATED BEVERAGES

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(ABSTRACT)

Fifty-one cultures of yeasts from 112 isolated from spoiled carbonated beverages were studied morphologically and culturally as a basis for a more extensive study and identification. Of these 28 were found to be spore formers, spores being formed on gypsum blocks and carrot slants. Twenty-four members of this group also produced spores on old malt extract agar slants. Sub-groups were made on the basis of surface growth on a liquid medium and on fermentation reactions.

Only three of the spore formers were found to produce distinct surface growth in liquid media. All members of this group fermented glucose with acid and gas. Other subgroups were made upon galactose, maltose and sucrose fermentations.

Eight of the twenty-two non-spore formers showed distinct surface growth. Among these variations were observed in morphology and fermentation reactions. In the remaining fourteen strains there were several distinct fermentative groups.

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